

52893 and 52894—Continued.

furnishes 1 kilogram (2½ pounds) at a single picking, 44 large succulent leaves, 20 to 30 centimeters long. It loses only one-fourth of its weight in cooking, while common spinach loses three-fourths of its weight and requires 300 leaves to make a kilogram. It makes a delicious salad. The plant is very hardy and easy to cultivate in any climate. The seeds can be sown at the end of February in northern Europe, and the plant thrives as well as it does in warm countries. The leaves are ready for picking two months after sowing, and on fertile soil the plant will yield all summer; any surplus can be fed to animals.

"The seeds, milled and bolted into flour, make an excellent feed. The analysis of the seeds shows the following percentages: Protein, 24.62; fat, 6; sugar and starch, 53.70; cellulose, 1.92; mineral matter, 3.46; water, 10.30. In Mexico this brown flour is used to make cakes.

"The stalks can be used for the extraction of cellulose and the manufacture of paper. An analysis of the dried stalks shows percentages as follows: Protein, 3; fat, 1.20; sugar and starch, 35.50; cellulose, 46.04; mineral matter, 5.16; water, 9.10."

For previous introduction, see S. P. I. No. 2003.

52894. POLYMNIA EDULIS Wedd. Asteraceæ.

"Tubers of a strong herbaceous plant, very decorative with its tall stalks 1.5 meters high, beautiful foliage, and yellow, autumnal flowers. The numerous, clustered, clean tubers are white, almost transparent, excessively sweet, and have a slight pear flavor. They are eaten raw in their native country, where they are keenly relished. The leaves, stalks, and tubers are greedily eaten by animals. The enormous quantity of sugar in the tubers yields three times as much alcohol as can be distilled from the Irish potato. Molasses can also be made from the tubers. A half-decayed tuber grew a plant which bore 32 tubers 15 to 20 centimeters long, weighing 3 kilograms.

"This hardy plant occurs wild and is also cultivated in the Andes Mountains. In Algeria irrigation is necessary. In any case, half of the foliage can be used during the summer for feed. At harvest the tubers are stored in a cellar. The plant is easily lifted from the soil and is superior to the Jerusalem artichoke and the sunflower in that it leaves nothing behind."

52895 to 52897.

From Kulara, Queensland, Australia. Seeds presented by J. A. Hamilton. Received April 14, 1921.

52895. ALBIZZIA LOPHANTHA (Willd.) Benth. Mimosaceæ.

A rapid-growing tree from Western Australia. The bark contains 8 per cent of tannin and the dry root 10 per cent of saponin. Cattle browse on the leaves. (Adapted from Maiden, *Useful Native Plants of Australia*, pp. 117, 315, and 537.)

For previous introduction, see S. P. I. No. 8243.

52896. ALPHITONIA EXCELSA (Fenzl) Reissek. Rhamnaceæ.

A tree 50 feet high, one of the characteristic trees of the Brigalow scrubs of New South Wales, Queensland, and northern Australia, with hard close-grained durable wood which takes a high polish; it is suitable for gunstocks, coopers' staves, and for indoor purposes. The wood is tough and warps in drying; near the outside it is pinkish and the inner wood is dark brown. The bark is occasionally used for tanning. (Adapted from Maiden, *Useful Native Plants of Australia*, p. 373.)

52897. PLEIOGYNIUM SOLANDRI (Benth.) Engl. Anacardiaceæ.
(*Spondias pleiogyna* F. Muell.)

A tree native to Queensland; the hard dark-brown wood with red markings resembles that of the American walnut. The grain is fairly close and splits quite straight. It is an excellent wood for the joiner or cabinetmaker and is also suitable for turnery. (Adapted from Maiden, *Useful Native Plants of Australia*, p. 599.)